Please amend the claims as follows (this listing replaces all prior versions):

        1. (Currently Amended) A method for allocating channels, comprising:

        receiving a message having a format that is in compliance with a communication
standard;

        determining the communication standard used by the received message according to the
format of the received message;

        determining available channels; and

        allocating a channel based on the available channels and the communication standard
used by the received message.

        2. (Original)   The method of claim 1 further comprising:

        sending an instruction to use the channel.

        3. (Previously Presented) The method of claim 2, wherein sending comprises sending an
instruction to a software-defined signal processing system to allocate the appropriate channel for
the received message.

        4. (Original)   The method of claim 1, wherein the spectrum of channels includes a
channel dedicated to AMPS.

        5. (Previously Presented) The method of claim 1, wherein the received message is a call.

        6. (Previously Presented) The method of claim 1, wherein the received message is a
message that is received through an antenna.

7. (Previously Presented) The method of claim 1, further comprising processing the received message for transmission.

8. (Currently Amended) Apparatus for allocating channels, comprising:

a memory that stores executable instruction signals; and

a processor that executes the instruction signals to:

receive a message having a format that is in compliance with a communication standard;

determine the communication standard used by the received message according to the format of the received message;

determine available channels; and

allocate a channel based on the available channels and the communication standard used by the received message.

9. (Original)   The apparatus of claim 8 further comprising instructions to:

send a notification to use the channel.

10. (Previously Presented) The apparatus of claim 9, wherein to send an instruction comprises sending an instruction to a software-defined signal processing system to allocate the appropriate channel for the received message.

11. (Original) The apparatus of claim 8, wherein the spectrum of channels includes a channel dedicated to AMPS.

12. (Previously Presented) The apparatus of claim 8, wherein the received message is a call.

13. (Previously Presented) The apparatus of claim 8, wherein the received message is a message that is received through an antenna.

14. (Previously Presented) The apparatus of claim 8, wherein the processor processes the received message for transmission.

15. (Currently Amended) An article comprising a machine-readable medium that stores executable instruction signals allocating channels, the instruction signals causing a machine to:

receive a message having a format that is in compliance with a communication standard;

determine the communication standard used by the received message according to the format of the received message;

determine available channels; and

allocate a channel based on the available channels and the communication standard used by the received message.

16. (Original) The article of claim 15, further comprising instruction signals causing a machine to:

send notification to use the channel.

17. (Previously Presented) The article of claim 16, wherein to send notification comprises sending an instruction to a software-defined signal processing system to allocate the appropriate channel for the received message.

18. (Original) The article of claim 15, wherein the spectrum of channels includes a channel dedicated to AMPS.

19. (Previously Presented)   The article of claim 15, wherein the received message is a call.

20. (Previously Presented)   The article of claim 15, wherein the received message is a message that is received through an antenna.

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21. (Previously Presented) The article of claim 15, wherein the instruction signals cause the machine to process the received message for transmission.

22. (Canceled)

23. (Canceled)

24. (Previously Presented) The apparatus of claim 8, wherein the processor sends an instruction to allocate a channel dedicated to the communication standard for communicating with a mobile device that sent the message.

25. (Previously Presented) The apparatus of claim 24, wherein the processor sends an instruction to a software-defined signal processing device to send another message to the mobile device to use the allocated channel.

26. (Previously Presented) The apparatus of claim 8, wherein the communication standard comprises at least one of advance mobile phone service (AMPS), global system for mobile communications (GSM), code division multiple access (CDMA), enhanced data rates for GSM evolution (EDGE) and wideband code division multiple access (WCDMA) standard.

27. (Previously Presented) The apparatus of claim 8, wherein the processor receives messages having formats that are in compliance with communication standards, at least some of different messages complying with different communication standards, and the processor allocates channels dedicated to the communication standards associated with the messages.

28. (Previously Presented) The apparatus of claim 8, wherein the processor receives messages having formats that are in compliance with communication standards, at least some of different messages complying with different communication standards, and the processor dynamically responds to the messages to utilize spectrum according to a current usage pattern.

29.   (Previously Presented) The apparatus of claim 8, wherein the processor determines frequencies licensed to a user of the message.

30.   (Previously Presented) The apparatus of claim 29, wherein the processor chooses from a list of available channels a channel that meets at least one of the frequency requirement and a bandwidth requirement.

31.   (Previously Presented) The apparatus of claim 30, wherein the processor sends an instruction to a software-defined signal processing device to send another message to a mobile device to use the allocated channel.

32.   (Previously Presented) The apparatus of claim 8, wherein the received message comprises a short-message, text, a housekeeping signal, or intended consumer signals.

33.   (Previously Presented) The apparatus of claim 14, wherein the message comprises a broadcast.

34.   (Previously Presented) The apparatus of claim 33, wherein the processor sends an instruction to allocate a channel dedicated to the communication standard for communicating with a mobile device that receives the broadcast.

35.   (Previously Presented) The apparatus of claim 33, wherein the processor sends an instruction to a software-defined signal processing device to send another message to the mobile device to use the allocated channel.

36.   (Canceled)

37.   (Canceled)

38. (New) The apparatus of claim 8, wherein the processor receives messages having formats that are in compliance with communication standards, at least some of different messages complying with different communication standards comprising at least two of advance mobile phone service (AMPS), global system for mobile communications (GSM), code division multiple access (CDMA), enhanced data rates for GSM evolution (EDGE) and wideband code division multiple access (WCDMA) standard, and the processor allocates channels dedicated to the communication standards associated with the messages.

39. (New) The apparatus of claim 8, wherein the processor receives messages having formats that are in compliance with communication standards, at least some of different messages complying with different communication standards comprising at least two of advance mobile phone service (AMPS), global system for mobile communications (GSM), code division multiple access (CDMA), enhanced data rates for GSM evolution (EDGE) and wideband code division multiple access (WCDMA) standard, and the processor dynamically responds to the messages to utilize spectrum according to a current usage pattern.

40. (New) Apparatus for allocating channels, comprising:
a memory that stores executable instructions; and
a processor that executes the instructions to implement:
receiving a first wireless message from a first wireless device and a second wireless message from a second wireless device, the first and second wireless devices complying with different communication standards, the first and second wireless messages having different formats each in compliance with the corresponding communication standard; and
for each of the received first and second wireless messages,
determining the communication standard used by the received message,
determining available channels, and
allocating a channel based on the available channels and the communication standard used by the received first or second message.

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41.   (New) The apparatus of claim 40 in which the first and second communication standards comprise two of AMPS, GSM, CDMA, EDGE, and WCDMA.

42.   (New) The apparatus of claim 40, further comprising executable instructions to implement: for each of the received first and second wireless messages, sending an instruction to a software-defined signal processing device to send another message to the first or second wireless device to use the corresponding allocated channel.

43.   (New) The apparatus of claim 40, further comprising executable instructions to implement: receiving additional wireless messages from additional wireless devices, at least some of the additional messages complying with different communication standards, and dynamically responding to the additional wireless messages to utilize spectrum according to a current usage pattern.

44.   (New) A method for allocating channels, comprising:

receiving a first wireless message from a first wireless device and a second wireless message from a second wireless device, the first and second wireless devices complying with different communication standards, the first and second wireless messages having different formats each in compliance with the corresponding communication standard; and

for each of the received first and second wireless messages,

determining the communication standard used by the received message,

determining available channels, and

allocating a channel based on the available channels and the communication standard used by the received first or second message.

45.   (New) The method of claim 44, further comprising, for each of the received first and second wireless messages, sending an instruction to a software-defined signal processing device to send another message to the first or second wireless device to use the corresponding allocated channel.